

Notice of Allowability

Application No.

10/716,374

Examiner

Anabel M. Ton

Applicant(s)

NAGAKUBO ET AL.

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 05/23/05.
2. ☒ The allowed claim(s) is/are 1,3-34.
3. ☒ The drawings filed on 18 November 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-34 are allowed.
2. The following is an examiner's statement of reasons for allowance: The prior art cited does not teach the instant invention for the following reasons:
 - Ohkawa (6,755,546) teaches a light guide plate for use in an LCD display with an emission face and a back face wherein the back face is provided with a great number of micro-reflectors that reflect the light emitted from the light source through the light guide plate. The micro-reflectors have a pair of slopes, which meet each other to form a ridge that gets closer with an increasing distance from the incidence face, forming a prismatic like shape. The micro reflectors have a fine unevenness and the formation of the micro reflectors (covering rate; are covered by micro reflectors per unit area) may be adjusted depending on the position on the back surface and are preferably arranged to have no striking periodic regularity in order to prevent an overlapping relation with other fine elements. Although having micro reflectors that lack periodic regularity in placement on the light guide plate, Ohkawa does not teach a planar illuminator having a reflection surface on which minute concavo-convex shapes are substantially randomly formed, the light irradiated from the light source is diffusively reflected by the reflection surface and wherein a prism shaped prism sheet is disposed between the reflection surface of the planar illuminator and the

Art Unit: 2875

illuminated object (adding the extra feature of a prism sheet between the planar illuminator and the object a feature which Ohkawa does not teach)

- Leadford (6,213,625) et al teaches a lens structure for a light guide, which teaches a multitude of concavo-convex lens structures for reflecting and refracting light emitted from the light source. Leadford does not teach a random distribution of these reflecting structures.
- Aho et al (4,874,228) teaches a backlit display with a light source and a curved reflective optical film that curves upwardly towards the end of the device in order to produce a uniform illumination over the entire area over an optical window. Aho does not teach the randomly formed concavo-convex reflection surface as shown by the instant invention.

Furthermore sufficient motivation to combine the above references or any of the prior art of record to anticipate the instant invention has not been found.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anabel M. Ton whose telephone number is (571) 272-2382. The examiner can normally be reached on 08:00-16:30.

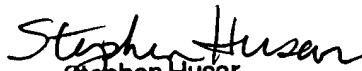
Art Unit: 2875

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anabel M Ton
Examiner
Art Unit 2875

AMT


Stephen Husar
Primary Examiner